

NOTES

Further notes on *Bertya sharpeana* Guymmer (Euphorbiaceae): a significant extension of its range in Queensland.

Until March 1990, Queensland Herbarium records showed that the rare and endemic perennial shrub *Bertya sharpeana* Guymmer occurred only at Mt Coolum (26°34'S, 153°03'E) in the Moreton Pastoral District of Queensland. However on 28th February 1990, one of us (SGP) discovered a new population of *Bertya sharpeana* at Sydney Heads (21°25'S, 148°34'E) in the Leichhardt Pastoral District (Map 1). Sydney Heads is situated about 75 km south-west of Mackay and 5 km north of Mt Britton, and is about 920 m above sea level. It is isolated and its only access is from Mt Adder road. The geology of the area is volcanic exposed rhyolite. About 50 plants were located in a windswept rocky area c. 50 m × 50 m supporting low open-heath vegetation of *Acacia* spp., *Astroloma* sp., *Leucopogon neo-anglicus*, *Leptospermum neglectum*, *Callistemon pearsonii*, *Pultenaea retusa* and *Banksia spinulosa*.

This species of *Bertya* was first collected at Mt Coolum in July 1966 by Dr A.G. Harold. Unfortunately his original specimen was not retained at Queensland Herbarium. As a result this species remained unknown until Messrs G.N. Batianoff and P.R. Sharpe rediscovered it on 17 September 1981. At this stage the flora of south-eastern Queensland was sufficiently well documented that the specimen was recognised to be an undescribed species.

A detailed taxonomic description is provided by Guymmer (1988). Specimens of *B. sharpeana* from Sydney Heads differ from those at Mt Coolum by

- (a) Young branches and foliage being noticeably more densely clothed with white stellate tomentum;
- (b) Upper surface of leaves retaining many white stellate hairs. (Mt Coolum specimens have mainly tuberculate upper lamina surfaces);
- (c) Dried specimens being very sweetly scented (Pearson, field notes).

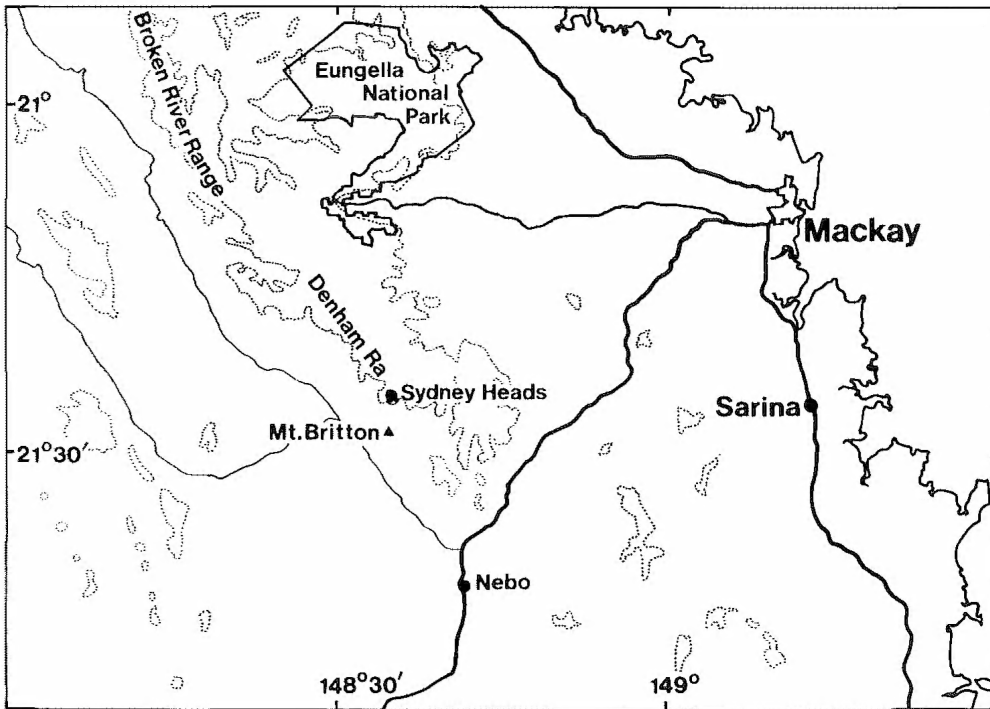
Guymmer (1988) described this new taxon as an endangered species occurring only on Mt Coolum. Mt Coolum is a volcanic plug consisting mainly of peralkaline rhyolite also known as comendate (Ewart 1985). The total area of Mt Coolum is about one square kilometre and it is estimated that less than 2% of the area is occupied by *B. sharpeana*. The main population occurs along the south-eastern cliffs some 150 m above sea level. Occasional plants are recorded at the south-eastern base of the mountain and on the northern and western slopes in *Eucalyptus* open-forest, woodland and in the margins of rainforest. However *B. sharpeana* is most abundant in closed-heath, where *Melaleuca nodosa*, *Phebalium woombye*, *Logania albiflora*, *Leptospermum* spp., *Banksia collina* and *Allocasuarina thalassoscopia* are the most common species.

The new locality record necessitates the reassessment of the conservation status of this species from 2E to 3V using the criteria of Briggs and Leigh (1988). Mt Coolum is an area now proposed for an Environmental Park, while the Sydney Heads area forms part of a proposed national park named "Diamond Cliffs". The geology of the two localities from which *Bertya sharpeana* has so far been recorded suggests that the species is endemic to rhyolitic outcrops. These are relatively common in southern and central parts of Queensland (Whitaker & Grimes 1975). It is reasonable to assume that other populations of this *Bertya* may be discovered on these outcrops with more intensive field work. Therefore the code V (vulnerable) is probably now more appropriate.

To date attempts to cultivate this species have not been successful.

Acknowledgements

Thanks are extended to James Elsol for useful comments and Will Smith for preparing the map.



Map 1. Locality of Sydney Heads, Central Queensland.

References

- BATIANOFF, G.N., SHARPE, P.R. & NELDNER, V.J. (1985). Flora and vegetation of Mt Coolum, Queensland. *Queensland Naturalist* 25: 28–56.
- BRIGGS, J.D. & LEIGH, J.H. (1988). Rare or Threatened Australian Plants. 1988 Revised Edition. Australian National Parks and Wildlife Service Special Publication No. 14. Canberra: Australian National Parks & Wildlife Service.
- EWART, A. (1985). Notes of the Geology of Mt Coolum. *Queensland Naturalist* 25: 1–5.
- GUYMER, G.P. (1988). Notes on *Bertya* Planchon (Euphorbiaceae). *Austrobaileya* 2(5): 427–431.
- WHITAKER, W.G. & GRIMES, K.G. (1975). Geological Survey of Queensland: Queensland Geology, Scale 1:2 500 000. Department of Mines, Brisbane.

George N. Batianoff

Queensland Herbarium, Meiers Road, Indooroopilly, Qld 4068

and Steven G. Pearson

Queensland National Parks and Wildlife Service

Eungella National Park, Dalrymple Heights, Qld 4757

Accepted for publication 27 March 1990